

Mineral Industry Surveys

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TIN IN JANUARY 2011

Domestic consumption of primary tin in January 2011 was estimated to be 2,260 metric tons (t), a decrease of 7% compared with that in December 2010, and an increase of 12% compared with that in January 2010. Imports for consumption were 4,290 t in January 2011, a 56% increase from those in December 2010, and a 180% increase over those in January

The Platts Metals Week average composite price of tin in January 2011 was \$16.45 per pound, compared with \$15.66 per pound in December 2010 and \$10.87 per pound in January 2010.

On December 17, 2010, the "Reduction of Lead in Drinking Water Act" was passed by the U.S. Congress and was signed into law by the President on January 4, 2011. Public Law No. 111-380 becomes effective January 4, 2014, and lowers the national standard for lead in faucets, pipe fittings, and pipes to 0.25%. The previous national standard was 8.0%. Industry sources noted that the bill harmonizes lead standards across the country. The lower lead standard may promote greater use of tin in plumbing fixtures since many fixtures are comprised of alloys of lead and tin, especially in solders (Plumbing Manufacturers International, 2011).

According to the latest survey conducted by the tin industry organization ITRI Ltd. (Frogmore, United Kingdom), global refined tin consumption was estimated to have increased by about 13% in 2010 to 360,300 t from that in 2009. Industrial and electronic solders together accounted for 54% of refined tin consumption, having increased by an estimated 22,300 t in 2010. Solder, primarily for electronic applications, has consistently accounted for more than 50% of the tin end use market since 2005. The new estimated world tin usage figure suggests that tin consumption has been higher than previously expected following the recent global financial crisis, with the new 2010 figures approximately the same as those of 2006. The study indicated that China's tin use had reached a new record level of 147,000 t, although consumption in the rest of the world was about 25,000 t less than its 2006 peak. ITRI estimated that the world's tin consumers used about 59,000 t of secondary (scrap) tin in 2009, and estimated that figure to have climbed to 60,000 t in 2010, with China accounting for more than 75% of

the world total. ITRI observed that its data came from 171 companies worldwide, representing, more than 47% of estimated refined tin usage (Metal-Pages, 2011).

Analysts at Commerzbank AG (Frankfurt, Germany) announced that tin supply restraints would likely continue into 2011. Indonesian tin exports totaled 92,500 t in 2010, 7% below 2009 levels. An exceptionally long rainy season affected Indonesia's tin production and transport, especially in the second half of the year. The Indonesian Government expected domestic production to be 90,000 t in 2011 if tin prices remained high (Platts Metals Week, 2011).

Malaysia Smelting Corp. (MSC) (Kuala Lumpur, Malaysia) launched an initial public stock offering for a listing on the Singapore Stock Exchange, in order to raise \$34 million. MSC earmarked the bulk of expected proceeds to develop new tin mines in Indonesia and Malaysia. MSC and its 75% owned Indonesian subsidiary, PT Koba Tin, produced 45,400 t of refined tin in 2010, an increase of 3.5% from that in 2009 (ITRI Ltd., 2011a).

PT Koba Tin (Jakarta, Indonesia) failed to reach its 2010 production target owing to unusually heavy rains during the year. Koba Tin produced 6,100 t of tin in 2010, 6% less than its target, and 1% less than its 2009 output. Koba Tin expected to sell 25% of its output to PT Timah Tbk (Bangka, Indonesia), in line with PT Timah's 25% ownership stake in the company; while 75% will be sold to Koba Tin's parent company, MSC (American Metal Market, 2011).

Western United Mines (Redruth, United Kingdom) reduced its staff of 60 workers to 44 employees at its South Crofty tin mine near Redruth following delays with local authorities in resolving land access. The South Crofty tin mine has a tin mining history dating back 300 years (ITRI Ltd., 2011b).

On June 24, 2011, the Platts Metals Week composite price for tin was \$15.16 per pound.

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TABLE 1 SALIENT TIN STATISTICS 1

(Metric tons, unless otherwise noted)

	20	2011	
	Year	December	January
Production, secondary ^{e, 2}	11,100	926	922
Consumption:			
Primary	26,900	2,430 °	2,260
Secondary	6,220	521	522
Imports for consumption, metal	35,300	2,750	4,290
Exports, metal	5,630	419	329
Stocks at end of period	6,920	6,920	6,660
Prices (average cents per pound): ³			
Metals Week composite ⁴	1,239.64	1,565.82	1,644.54
Metals Week New York dealer	954.13	1,212.43	1,283.44
London, standard grade, cash	925.15	1,185.81	1,244.93
Kuala Lumpur	922.17	1,172.95	1,260.19

^eEstimated. ^pPreliminary. ^rRevised. XX Not applicable.

 $\label{eq:table 2} \textbf{METALS WEEK COMPOSITE PRICE}^1$

(Cents per pound)

Period	High	Low	Average		
2010:			_		
December	1,617.91	1,449.43	1,565.82		
Year	1,719.49	937.69	1,239.64		
2011, January	1,802.34	1,583.57	1,644.54		

¹The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges and a risk factor. It is normally substantially higher than other tin prices.

Source: Platts Metals Week.

¹Data are rounded to no more than three significant digits, except prices.

 $^{^2}$ Includes tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

³Source: Platts Metals Week.

⁴The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges and a risk factor. It is normally substantially higher than other tin prices.

 ${\bf TABLE~3}$ TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1

(Metric tons, unless otherwise noted)

		Tinplate (all forms)				
	Tinplate waste (waste, strips, cobbles, etc.)	Gross	Tin	Tin per metric ton of plate		
Period	(gross weight)	weight	content	(kilograms)	G1: , 2	
2010:	(gross weight)	weight	content	(Kilogranis)	Shipments ²	
	_					
December	2,810	74,600	504	6.8	179,000	
Year	18,200	1,420,000 ^r	6,920 ^r	4.9 ^r	2,030,000	
2011, January	1,860	101,000	528	5.2	118,000	

rRevised.

 $\label{eq:table 4} \textbf{U.s.} \ \textbf{TIN IMPORTS FOR CONSUMPTION AND EXPORTS}^1$

(Metric tons)

	2	2010		
Country or product	Year	December	January	
Imports:				
Metal (unwrought tin):				
Belgium			250	
Bolivia	6,060	359	699	
Brazil	75		100	
Chile	641		60	
China	887	160	393	
Indonesia	3,970	504	255	
Malaysia	4,500	24	160	
Peru	16,500	1,300	1,570	
Singapore	996		76	
Thailand	1,310	400	725	
Other	327	1		
Total	35,300	2,750	4,290	
Other (gross weight):				
Alloys	1,290	108	247	
Bars and rods	3,190	182	211	
Foil, tubes, pipes	80	3	14	
Plates, sheets, strip	135	4	5	
Waste and scrap	57,300	4,280	4,970	
Miscellaneous	3,540	255	148	
Total	65,500	4,830	5,590	
Exports (metal)	5,630	419	329	

⁻⁻ Zero.

Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits.

²Source: American Iron and Steel Institute monthly publication.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

 ${\bf TABLE~5}$ CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1

(Metric tons of contained tin)

	2010			2011			
	December				January		
Product	Year ^p	Primary	Secondary	Total	Primary	Secondary	Total
Alloys (miscellaneous) ³	6,070	682	W	682	561	W	561
Babbitt	220	15	W	15	16	W	16
Bar tin and anodes	239	20		20	6		6
Bronze and brass	2,000	95	69	164	87	70	157
Chemicals	2,590	182	W	182	212	W	212
Collapsible tubes and foil	W	W	W	W	W	W	W
Solder	3,710	270	142	412	172	142	314
Tinning	331	24		24	33		33
Tinplate ⁴	6,600	504		504	528		528
Tin powder	192	15	W	15	15	W	15
White metal ⁵	W	W	W	W	W	W	W
Other	416	25	11	36	28	11	38
Total reported	22,400	1,830	221	2,050	1,660	222	1,880
Estimated undistributed consumption ⁶	10,800	600	300	900	600	300	900
Grand total	33,200	2,430	521	2,950	2,260	522	2,780

^pPreliminary. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revisions to previous month(s) data.

³Includes terne metal.

⁴Includes secondary pig tin and tin components of tinplating chemical solutions.

⁵Includes pewter, britannia metal, and jewelers' metal.

⁶Estimated consumption of plants reporting on an annual basis.